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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/715,138 | 11/17/2003 | Scott R. Hite | Hite C-H80 | 1896 |
| 23474 | 7590 | 09/08/2006 | EXAMINER | |
| FLYNN THIEL BOUTELL & TANIS, P.C. 2026 RAMBLING ROAD KALAMAZOO, MI 49008-1631 | | | DWIVEDI, VIKANSHA S | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3746 | |

DATE MAILED: 09/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

| | | | |
|-----------------|---------------------|--------------|----------------|
| Application No. | 10/715,138 | Applicant(s) | HITE, SCOTT R. |
| Examiner | Vikansha S. Dwivedi | Art Unit | 3746 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 05 April 2004.
2a) This action is FINAL. 2b) This action is non-final.
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) Claim(s) _____ is/are allowed.
6) Claim(s) 1-20 is/are rejected.
7) Claim(s) _____ is/are objected to.
8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
10) The drawing(s) filed on 17 November 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 04/05/2004.

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) Notice of Informal Patent Application (PTO-152)
6) Other: _____.

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities: Diffuser hose 170 disclosed in the specifications on Page 10 paragraph 52 is not shown in the drawing. The application is inconsistent with the numbers used to show parts of invention in the drawing. For example:

180: used for intake line and outlet

170: is used to show Pivot block as well as the pivot arm

171: is used to show lever arm and bubbles

131: is used to show proximal ends and foot valves

132: is used to splitter and diffuser tubing

166: is a drive lever that should be shown in Figure 13A according to the specifications but 166 is vaguely shown in Figure 13A.

Anchor: is shown by 160 and 129

Bottom Surface: is shown by 160 and 129

These are just examples of the discrepancies it is requested that the applicant reviews the application for any other inconsistencies.

Appropriate correction is required.

Drawings Objections

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the support member

claimed by the applicant in Claims 1, 5 and 8 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 recites the limitation "the submerged bottom surface" in line 15. There is insufficient antecedent basis for this limitation in the claim.

Claims 1, 5, and 6 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites limitation in line 15 "...the submerged bottom surface of the body of water...". It is not clear what the applicant means with that limitation it is unclear how does the body of water has a bottom surface and how it is a submerged bottom surface. It is suggested that the applicant reviews the claim.

Claim 5 recites limitation in line 8 "...arcuately rectangularly...", the use of these two terms together is not clear; rectangular has flat sides, it cannot be arcuate.

Claims 5 and 6 use term "biasly". This is not a word according to the dictionary applicant is has no explanation for it in the specifications.

Claims 2 and 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 claims a pump (as disclosed in Claim 1) activated by a magnetic force. This is contradictory to claim 1 that discloses a wind powered pump. Examiner understands from the applicant's disclosure that the magnet is part of the driving unit. Applicant should have a driving unit activated by a magnetic force not a pump activated by magnetic force.

Claim 2 claims a pump (as disclosed in Claim 1) activated by a mechanical force. This is contradictory to claim 1 that discloses a wind powered pump.

Claim Objections

Claim 4 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 4 depends on Claim 4, for examination purposes the claims is considered to depend on Claim 3.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 3, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zan (U.S. Patent number 4,657,675) in view of Willmouth (U.S. Patent number 4,329,593).

Zan discloses an aeration system (Figure 1) for a body of liquid comprising: a support member (26, hollow elongated member as shown in Figure 1) which is disposed within the body of liquid proximate the top surface (shown in Figure 1 at water level) thereof; a solar-driven (31) rotor unit supported on said support member (see column 2, lines 49-

53); a pump (33) that is activated by solar power of said rotor unit (Column 2, lines 49-53), said pump being supported on said support member having a pump chamber (Inside of 26, shown in Figure 1); a drive mechanism connected to said rotor unit and said pump to actuate said pump ; and an aeration tube (tube shown in figure 1 by 23) sealingly engaged (watertight casing 28) with said pump, said aeration tube having a distal end disposed proximate the submerged bottom surface of the body of water such that when said pump is activated, air is displaced from said pump chamber, through said aeration tube, to within the liquid (Shown in Figure 1). Zan does not disclose a wind-driven rotor unit; wherein said pump is activated by a magnetic force (163, 164); Willmouth discloses cup type impellers utilized on wind energy machines; wherein said pump is activated by a mechanical force as the system disclosed by Willmouth is operated by using a machine or mechanism. At the time of invention it would have been obvious to one skilled in the art to use wind energy to drive the motor as it is a very popular and long used method for example anemometers.

Claims 4, 5, 6, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zan (U.S. Patent number 4,657,675) in view of Willmouth (U.S. Patent number 4,329,593), further in view of Mabbs (U.S. Patent number 2,379,817).

As explained above Zan in view of Willmouth teaches the invention substantially as disclosed by the applicant. Zan in view of Willmouth does not teach a drive mechanism that has a pump lever that translates the rotary motion into linear motion. Figure 1 of Mabbs discloses a drive shaft 58 that translates its rotational motion into a linear piston pumping motion by a cam 55 and follower 56. The piston 31 is raised by spring 32 to

convert the rotational motion into linear motion. It would have been obvious to one skilled in the art to use teachings of Mabbs in view of Zan and to transfer the rotation motion of Willmouth into a linear motion to operate the pump of Zan so the user can use the alternative power of the wind to operate the pump of Zan since electricity may not be readily available in the waters.

Allowable Subject Matter

Claim 7, 8, 13-20 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vikansha S. Dwivedi whose telephone number is 571-272-7834. The examiner can normally be reached on M-F, 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy S. Thorpe can be reached on 571-272-4444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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VSD

Anthony D. Stashick

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PRIMARY EXAMINER